

MATERIAL SAFETY DATA SHEETDATE PREPARED: 06/23/2003
MSDS No: 7185**1. PRODUCT AND COMPANY IDENTIFICATION****PRODUCT NAME:** ORTHO® Basic Solutions™ Liquid Edger Ready-To-Use
PRODUCT DESCRIPTION: Herbicide**MANUFACTURER**The ORTHO Group
P.O. Box 190
Marysville, OH 43040**24 HR. EMERGENCY TELEPHONE NUMBERS****CHEMTREC (U.S.):** (800) 424-9300
Emergency Phone: 1-800-225-2883**EPA REG. NO.:** 71995-10-239 **PN:** 6069**2. COMPOSITION / INFORMATION ON INGREDIENTS**

<u>Chemical Name</u>	<u>Wt. %</u>	<u>CAS#</u>
Glyphosate, isopropylamine salt	0.75	38641-94-0
Other Ingredients	99.25	

3. HAZARDS IDENTIFICATION**EMERGENCY OVERVIEW****IMMEDIATE CONCERNS:** CAUTION: Causes eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling. KEEP OUT OF REACH OF CHILDREN**POTENTIAL HEALTH EFFECTS****EYES:** This substance is slightly irritating to the eyes. Eye contact may include discomfort, tearing, swelling, redness, and blurred vision. See Toxicological Information, Section 11.**SKIN:** This substance is not expected to cause skin irritation. See Toxicological Information, Section 11.**INGESTION:** If swallowed, this product may cause gastrointestinal tract irritation. See Toxicological Information, Section 11.**INHALATION:** If inhaled, this substance is considered practically non-toxic. This substance may be irritating if inhaled. See Toxicological Information, Section 11.**ROUTES OF ENTRY:** Skin contact, eye contact, inhalation.**COMMENTS HEALTH:** Inhalation and skin contact are expected to be the primary routes of occupational exposure to this product. Occupational exposure to this material has not been reported to cause significant adverse health effects. However, swallowing of a similar, but more concentrated formulation, has been reported to produce gastrointestinal discomfort, nausea, vomiting and diarrhea.**4. FIRST AID MEASURES****EYES:** Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Call a poison control center or doctor for treatment advice.**SKIN:** If on skin or clothing, take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.**INGESTION:** If swallowed, call a poison control center or doctor immediately for treatment advice. Have person sip glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Never give anything by mouth to an unconscious person.**INHALATION:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration,

preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: > (212°F)TAG CC

EXTINGUISHING MEDIA: Water spray, foam, CO₂, dry chemical or any class B extinguishing agent.

FIRE FIGHTING PROCEDURES: For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment. This may include self-contained breathing apparatus to protect against the hazardous effects of normal products of combustion or oxygen deficiency. Equipment should be thoroughly cleaned after use. Read the entire document.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Soak up spilled material with paper towels and discard in trash.

LARGE SPILL: Liquid spills on floor or other impervious surfaces should be contained or diked, and should be absorbed with attapulgite, bentonite or other absorbent clays. Collect contaminated absorbent, place in plastic-lined metal drum and dispose of in accordance with instructions provided under Section 13. "DISPOSAL". Thoroughly scrub floor or other impervious surface with a strong industrial type detergent solution and rinse with water. For liquid spills that soak into the ground, contact the applicable Federal, State and or County Health Dept. for disposal recommendations. If disposal is required then refer to Section 13 "DISPOSAL" for instructions. Leaking containers should be separated from non-leakers and either the container or its contents transferred to a drum or other non-leaking container and disposed of in accordance with instructions provided under Section 13 "Disposal". Any recovered spilled liquid should be similarly collected and disposed of. Do not contaminate water, foodstuffs or feed by storage or disposal.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Keep pesticide in original container. For containers larger than 24 oz.: Place sprayer nozzle under handle on container so the sprayer is not below level of contents of container to prevent leakage. Store in a secure, preferably locked, storage area. Protect container from freezing.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: No special ventilation is necessary.

PERSONAL PROTECTION

EYES AND FACE: For application of product in accordance with label instructions, no special eye protection is needed. Handling of the product is not likely to present an eye exposure concern during normal handling. In the event of an accidental discharge of the material during manufacture or handling which could cause eye contact, workers should wear goggles or a face shield.

SKIN: No special skin protection is usually necessary. Avoid prolonged or frequently repeated skin contact with this material. Skin contact can be minimized by wearing protective clothing. Wash thoroughly with soap and water after handling.

RESPIRATORY: Handling of the product is not likely to present an airborne exposure concern during normal handling. In the event of an accidental discharge of the material during manufacture or handling which produces a heavy mist, workers should put on respiratory protection equipment. Consult respirator manufacturer to determine appropriate type of equipment. Observe respirator use limitations specified by NIOSH MSHA or the manufacturer. For application of product in accordance with label instructions, no special respiratory protection is required.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

APPEARANCE: Yellow or off-white hazy liquid.

pH: ~7.1 to 7.5

SOLUBILITY IN WATER: Soluble

DENSITY: 8.3-8.4 lbs/gal.

SPECIFIC GRAVITY: 1.0024 at 20°C

VISCOSITY: Same as water.

10. STABILITY AND REACTIVITY

STABLE: YES

HAZARDOUS POLYMERIZATION: YES

HAZARDOUS DECOMPOSITION: None.

11. TOXICOLOGICAL INFORMATION

ACUTE

EYES: This material caused moderate irritation to the eyes of rabbits with reversible corneal injury.

DERMAL LD₅₀: The dermal LD₅₀ in rabbits was > 5000 mg/kg. FIFRA Category IV.

ORAL LD₅₀: Rat = >5.0 g/kg. EPA FIFRA toxicity category - IV.

INHALATION LC₅₀: Practically non-toxic, (Rat 4-hr LC₅₀ >10mg/L). EPA FIFRA toxicity category - IV.

SKIN EFFECTS: Non-irritating to skin.

SENSITIZATION: Guinea pig - no evidence of allergic skin reactions.

SUBCHRONIC: Data from glyphosate laboratory toxicology studies were conducted with a formulation comprised of 62% isopropylamine salt of glyphosate (MON 0139). Rabbits - 3 week dermal: Repeated daily primarily resulted in slight skin irritation. Dogs - 6 month feeding: Only slight body weight changes noted. Additional toxicity information is available on glyphosate, the active herbicidal ingredient of MON 0139. Rats - 90 day feeding: No treatment related effects. Mice - 90 day feeding: Decreased weight gains at the high dose level group animals.

CARCINOGENICITY:

CARCINOGENICITY COMMENTS: GLYPHOSATE: Glyphosate is not considered to be a carcinogen. Glyphosate did not produce tumors in any of the long-term toxicology studies. EPA has classified glyphosate in category "E" (Evidence of noncarcinogenicity for humans). Mice: 2-year feeding study. Reduced body weight gain and effects on liver tissues were observed at high dose levels. Rats: 2-year feeding study. Reduced body weight gain and eye changes were observed at the high dose level in one study, while no treatment related effects occurred in a second study conducted at lower dose levels. Dogs: No adverse effects were observed in feeding studies with dogs.

TERATOGENICITY: GLYPHOSATE: No evidence of teratogenic effects. Results of rat and rabbit teratology studies indicate that no birth defects were noted. This included dose levels of glyphosate that were maternally toxic.

REPRODUCTIVE TOXIN: GLYPHOSATE: No evidence of adverse reproductive effects. Glyphosate was fed continuously to rats at very high dose levels for 2 successive generations. Toxicity was reported in offspring from the high dose, a level which also produced adverse effects on the mothers. In a 3-generation study conducted at lower dose levels, no effects were seen on the ability of male or female rats to reproduce.

MUTAGENICITY: GLYPHOSATE: Glyphosate has not produced any genetic changes in various mutagenicity tests involving animals and animal or bacterial cells.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Do not apply directly to water. Do not contaminate water when disposing of equipment washwaters.

13. DISPOSAL CONSIDERATIONS

FOR LARGE SPILLS: Material collected that cannot be reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, state, or local procedures.

PRODUCT DISPOSAL: Carefully follow all label directions and precautions: If empty: Do not reuse container. Place in trash or offer for recycling if available. If partially filled: Call local solid waste agency or 1-800-CLEANUP for disposal instructions. Never place unused product down any indoor or outdoor drain.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)
PROPER SHIPPING NAME: Not Regulated

SPECIAL SHIPPING NOTES: The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

PRODUCT CLASSIFICATION UNDER SECTION 311 OF SARA				
ACUTE: NO	CHRONIC: NO	FIRE: NO	REACTIVITY: NO	PRESSURE GENERATING: NO

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: All non FIFRA regulated components are on the US EPA's TSCA Inventory List.

16. OTHER INFORMATION

NFPA CODES

FIRE: 0 **HEALTH:** 0 **REACTIVITY:** 0

APPROVAL DATE: 06/23/2003

REVISION SUMMARY New MSDS

ADDITIONAL MSDS INFORMATION: NFPA Hazard Rating: 0=Least; 1=Slight; 2=Moderate; 3=High; 4=Severe.

GENERAL STATEMENTS: This document contains health, safety, and environmental information useful to emergency response agencies, health care providers, manufacturers, and workers/employees. It does not replace the precautionary language, use directions, or the storage and disposal information found on the product label.

COMMENTS: Use of this product is regulated by the U.S. Environmental Protection Agency (EPA) through the approved product label. It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

MANUFACTURER DISCLAIMER: The information contained herein is, to the best of the Manufacturer's (see Section 1) knowledge and belief, accurate and reliable as of the date of preparation of this document. However, no warranty or guarantee, express or implied, is made as to the accuracy or reliability, and the Manufacturer shall not be liable for any loss or damage arising out of the use thereof. No authorization is given or implied to use any patented invention without a license. In addition, the Manufacturer shall not be liable for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices or from any hazards inherent in the nature of the product.